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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

What is claimed is:

Claim 1 (Canceled)

Claim 2 (Currently Amended): The catheter as recited in claim 1, wherein A catheter for

delivering a therapeutic agent to a selected site within an organism, the catheter comprising, in

combination:

al

a solid catheter tip; and

a tubular section having a proximal end and a distal end, the distal end attached to the

solid catheter tip, the tubular section comprising solid sections and a microporous membrane

section, the microporous membrane section further comprisinges, a first end and a second

end, the first end and second end coupled to the solid sections forming a continuous cross

section of the tubular section.

Claim 3 (Currently Amended): The catheter as recited in claim 24, wherein the solid tubular

sections comprises a radio opaque material.

Claims 4-9 (Canceled)

Claim 10 (Currently Amended): The catheter as recited in claim 119, wherein the diffusion

sections are microporous membrane sections.

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Claim 11 (Currently Amended) The catheter as recited in claim 10, wherein A catheter for

delivering a therapeutic agent to selected sites within an organism, the catheter comprising in

combination:

a solid catheter tip; and

a tubular section having a proximal end and a distal end, the distal end attached to the

solid catheter tip, the tubular section including a solid section and at least two

diffusion sections, the diffusion sections longitudinally aligned from the distal end

corresponding to the selected sites, the diffusion sections further comprise, a first end

and a second end, the first end and second end coupled to the solid section forming a

continuous cross section of the tubular section.

Claim 12 (Currently Amended) The catheter as recited in claim 119, wherein the solid tubular

section comprises a radio opaque material.

Claim 13-16 (Canceled)

Claim 17 (Currently Amended) A system for delivering a therapeutic agent to selected sites

within an organism, comprising:

a pump:

at least two catheters each comprising a tubular section having a solid section and a

microporous membrane section; and

a manifold having an entrance end and exit opening, the exit opening connected to a

the proximal end of the at least two catheters and the entrance end coupled to the

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pump.

Claim 18 (Currently Amended) The system as recited in claim 17, wherein the eatheter

microporous membrane section further comprises, a first end and a second end, the first end and

second end coupled to the solid section forming a continuous cross section of the tubular section.

Claim 19 (Currently Amended) The system as recited in claim 17, wherein the eatheter solid

tubular section comprises a radio opaque material.

Claim 20 (Original) The system as recited in claim 17, wherein the pump is an implantable

pump.

Claim 21(Original) The system as recited in claim 17, wherein the pump is an external pump.

Claim 22 (Canceled)

Claim 23 (Currently Amended): The system-as recited-in-claim-22, wherein A system for

delivering a therapeutic agent to a selected site within an organism, comprising:

a pump; and

a catheter connected to the pump, the catheter including:

a solid catheter tip; and

a tubular section having a proximal end and a distal end, the distal end

attached to the solid catheter tip, the tubular section including a solid section

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and a microporous membrane section, the catheter microporous membrane

section further comprisinges, a first end and a second end, the first end and

second end coupled to the solid section forming a continuous cross section of

the tubular section.

Claim 24 (Currently Amended): The system as recited in claim 232, wherein the eatheter solid

tubular section comprises a radio opaque material.

Claim 25 (Currently Amended): The system as recited in claim 232, wherein the pump is an

implantable pump.

Claim 26 (Currently Amended): The system as recited in claim 232, wherein the pump is an

external pump.

Claim 27 (Currently Amended): A system for delivering a therapeutic agent to selected sites

within an organism, comprising:

a pump;

at least two catheters each having a distal end and proximal end, the distal end having

a closed end, and a tubular section having a solid section and at least two diffusion

sections, the diffusion sections longitudinally aligned from the distal end

corresponding to the selected sites; and

a manifold having an entrance end and exit opening, the exit opening connected to a

the proximal end of the at least two catheters and the entrance end coupled to the

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pump.

Claim 28 (Currently Amended): The system as recited in claim 27, wherein the catheter diffusion

sections are microporous membrane sections.

Claim 29 (Currently Amended): The system as recited in claim 28, wherein the eatheter

diffusion sections further comprise, a first end and a second end, the first end and second end

coupled to the solid section forming a continuous cross section of the tubular section.

Claim 30 (Currently Amended): The system as recited in claim 27, wherein the eatheter solid

tubular section comprises a radio opaque material.

Claim 31 (Currently Amended): The system as recited in claim 27, wherein the eatheter tubular

section further comprises, an outer tubular wall and an inner tubular wall, the outer tubular wall

having at least one opening within the diffusion sections through to the inner tubular wall, the

inner tubular wall lined with a microporous membrane.

Claim 32 (Currently Amended): The system as recited in claim 31, wherein the eatheter

microporous membrane is located at the diffusion sections.

Claim 33 (Currently Amended): The system as recited in claim 31, wherein the eatheter

microporous membrane further comprises, an outer area and an inner area, the outer area having

an interference fit with the inner tubular wall.

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Claim 34 (Currently Amended): The system as recited in claim 32, wherein the eatheter

microporous membrane further comprises, an outer area and an inner area, the outer area having

an interference fit with the inner tubular wall.

Claim 35 (Original): The system as recited in claim 27, wherein the pump is an implantable

pump.

Claim 36 (Original): The system as recited in claim 27, wherein the pump is an external pump.

Claim 37-43 (Canceled)

Claim 44 (Currently Amended): A system for delivering a therapeutic agent to selected sites

within an organism comprising:

a pump;

at least two catheters each catheter comprising a tubular section having a solid

section and a diffusion area, and an outer tubular wall and an inner tubular wall, the

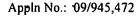
outer tubular wall having at least one opening through to the inner tubular wall, the

inner tubular wall lined with a microporous membrane; and

a manifold having an entrance end and exit opening, the exit opening connected to a

the proximal end of the at least two catheters and the entrance end coupled to the

pump.



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Claim 45 (Currently Amended): The system as recited in claim 44, wherein the eatheter solid tubular section comprises a radio opaque material.

Claim 46 (Currently Amended): The system as recited in claim 44, wherein the eatheter microporous membrane is located at the diffusion area.

Claim 47 (Currently Amended): The system as recited in claim 44, wherein the eatheter microporous membrane further comprises, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 48 (Currently Amended): The system as recited in claim 46, wherein eatheter the microporous membrane further comprises, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 49 (Original): The system as recited in claim 44, wherein the pump is an implantable pump.

Claim 50 (Original): The system as recited in claim 44, wherein the pump is an external pump.

Claim 51-60 (Canceled)